



ORTVAY KOLLOKVIUM // Ortway Seminar Series

2017. május 4. csütörtök 15:00-kor
4th May 2017., Thursday 3pm

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Gene transfers, like fossils, can date the tree of life

Abstract:

The geological record provides the only source of absolute time information to date the tree of life. But most life is microbial, and most microbes do not fossilize, leading to major uncertainties about the ages of microbial groups and the timing of some of the earliest and most important events in life's evolutionary history. I discuss our recent results, which show that patterns of lateral gene transfer deduced from analysis of modern genomes encode a novel and highly informative source of information about the temporal coexistence of lineages throughout the history of life. We use new phylogenetic methods to reconstruct the history of thousands of gene families and show that dates implied by gene transfers are strongly correlated with estimates from relaxed molecular clocks in Bacteria, Archaea and Eukaryotes. A comparison with mammalian fossils shows that gene transfer in microbes is potentially as informative for dating the tree of life as the geological record in macroorganisms.

Minden érdeklődőt szívesen látunk! Az előadás előtt negyed órával az előadóban teát szolgálunk fel.

All visitors are welcome. Tea and biscuits are served 15 min prior the lectures at the location.

Helyszín: ELTE Pázmány Péter s. 1/A alatti épületében a földszinti 0.81 (Ortvay) terem.

Location Lágymányos Eötvös Campus (address: Pázmány Péter s. 1/A), Northern Building, Room Ortway (0.81).

Az előadás-sorozatról az interneten az "ortvay-koll.elte.hu" címen található információ.

Further information available at the "ortvay-koll.elte.hu" website.